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(21) International Application Number: PCT/US98/00944 (22) International Filing Date: 16 January 1998 (16.01.98) (30) Priority Data: 60/035,404 17 January 1997 (17.01.97) US (71) Applicant (for all designated States except US): REGENTS OF THE UNIVERSITY OF MINNESOTA [US/US]; 100 Church Street, S.E., Minneapolis, MN 55455 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): WACKETT, Lawrence, P. [US/US]; 1575 Merrill Street, St. Paul, MN 55108 (US). SADOWSKY, Michael, J. [US/US]; 710 Lovell Avenue, Roseville, MN 55113 (US). De SOUZA, Mervyn, L. [IN/US]; 1029 Raymond Avenue #10, St. Paul, MN 55114-11334 (US). MINSHULL, Jeremy, S. [GB/US]; 11 Homer Lane, Menlo Park, CA 94025 (US). (74) Agent: MCCORMACK, Myra, H.; Muetting, Raasch & Gebhardt, P.A., P.O. Box 581415, Minneapolis, MN 55458-1415 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: DNA MOLECULES AND PROTEIN DISPLAYING IMPROVED TRIAZINE COMPOUND DEGRADING ABILITY		
(57) Abstract This invention relates to the identification of homologs of atrazine chlorohydrolase and the use of these homologs to degrade s-triazine-containing compounds. In particular, this invention includes the identification of homologs of atrazine chlorohydrolase encoded by a DNA fragment having at least 95 % homology to the sequence from the nucleic acid sequence beginning at position 236 and ending at position 1655 of SEQ ID NO:1, where the DNA fragment is capable of hybridizing under stringent conditions to SEQ ID NO:1 and has altered catalytic activity as compared with wild-type atrazine chlorohydrolase.		